REMARKS

The Examiner's action dated February 5, 2009, has been received, and its contents carefully noted.

In order to advance matters, claims 1-18 have been replaced by new claims 19-35.

New claim 19 combines the subject matter of original claims 1 and 2, while new claims 20-35 are essentially identical to original claims 3-18.

New claim 30, which replaces original claims 16, has been drafted to overcome the claim objection presented in Section 1 and the formal rejections presented in Sections 3-5 of the action. It is noted that the phrase "discharge opening" appeared in original claim 16, and not claim 17.

New claim 30 now specifies that the element coupled magnetically to the actuating device is mobile in translation between two positions. Support for this recitation will be found in the specification at page 10, lines 3-5, wherein it is stated that control ring 8 is able to slide parallel with the axis X-X'. This limitation is also illustrated in the drawing figures.

The prior art rejections presented in the action are traversed for the reason that the claims, as now revised, clearly distinguish patentably over any reasonable combination of the teachings of the prior art.

The present invention relates to a valve (1; ...) having a needle (3; ...) that is coupled to an actuating device

(5; .,.) through a sealed and non-magnetic partition (4). The actuating device (5;...) is provided with several magnets (52; ...) and magnetic bodies (53; ...). According to the invention, the needle (3; ...) has no magnets and is provided with ribs (36;...) formed from a magnetic material, which enables a coupling force to be efficiently transmitted between the actuating device (5; ...) and the needle (3; ...).

As mentioned in the specification, at page 8, lines 6-8, the ribs (36; ...) can constitute the induced poles of the polar masses formed by the magnetic bodies (53). This is shown in figure 1A where the field lines (L) created by the magnets (52) pass through the bodies (53) and the ribs (36).

Nothing resembling this structural combination can be found in the prior art.

Katsuyama discloses a valve whose needle (4) is provided with permanent magnets (3). This is not only different from, but actually contrary to, the approach of the present invention.

Katsuyama clearly discloses that magnets (3) are essential, key elements of his device. In other words, the valve of Katsuyama could not work without such magnets (3). Thyerefore, it must be concluded that Katsuyama teaches way from the provision of a needle that does not have magnets. Katsuyama certainly does not teach any way in which his valve could operate

without magnets 3. Katsuyama certainly does not disclose a needle having ribs.

It should be noted that Katsuyama is cited in the introductory part of this application, which describes, on page 1, the drawbacks of the valve structure disclosed in this reference. The examiner is requested to review that description.

The secondary reference, Stafford, cannot be considered to make up for the Deficiencies of the Katsuyama disclosure.

Stafford discloses a parenteral liquid administration apparatus with a flow regulator (10) having a rigid body (20) where a valve member (50) has an elongated tapered portion (51) inserted within a through orifice (27) of an internal flange (25) of the rigid body (20). Movement of the valve member (50) is obtained by screwing or unscrewing a collar (60) on an external thread (70) of the rigid body (20). The valve member (50) and the collar (60) are magnetically coupled and the notion of "magnetically coupling" is explained at column 2, lines 54 to 56: either one or both of items 50 and 60 could contain a single permanent magnet.

In other words, Stafford is only concerned with devices in which only one magnet and one magnetic part (53) are respectively provided on the valve member (50) and on the collar (60) whereas, in Katsuyama, and in the present invention, several magnets (6) are provided on the external piston (7). For this

first reason alone, it would not be obvious to modify the device of Katsuyama according to the teachings of Stafford.

Moreover, neither Katsuyama nor Stafford discloses a plurality of ribs formed from a magnetic material, so that no possible combination of the respective teachings of Katsuyama and Stafford could lead one of ordinary skill in the art to reach the present invention as now claimed. Since Stafford only devices employing only one magnet and one magnetic section (53), used, respectively, on the valve member (50) and on the collar (60), there would be no reason to provide any ribs since they would not perform any function, in view of the fact only one set of magnetic field lines are created between the magnetic elements 50 and 53. Therefore, one of ordinary skill in the art would not consider using ribs on the basis of the teachings of Stafford.

On the other hand, the shaft (4) of Katsuyama has no ribs and the part around which the magnets (3) are mounted is a bolt (12) which has no ribs. Actually, ring-like yokes (11) are employed by Katsuyama, which would logically lead one of ordinary skill in the art towards a solution different from that of the present invention.

With regard to claims 20 and 21, which replace claims 3 and 4, since Stafford only discloses the use of one magnet, and only requires one magnet, that reference cannot be considered to suggest ribs having the claimed geometric relationships.

Claim 22, which replaces claim 5, defines a further novel and unobvious feature of the invention in that this claim specifies that the ribs are unitary with, and are made of the same material as, the body of the needle. Of course, Katsuyama requires that magnets 3 be made of a different material from yokes 11 and the magnets and yokes cannot form a unitary body. Stafford does not provide any disclosure relating to ribs.

Claim 23, which replaces 6, also clearly defines over the applied references, neither of which discloses a body of magnetic material associated with non-magnetic filling material. It is understood that yokes associated with magnets would be made of magnetic material.

With respect to claims 24 and 25, which replace claims 7 and 8, please note that Gery concerns a structure for producing a magnetic field that has no direct link with a valve. No needle and no actuating device similar to the ones of the invention can be identified in this prior art, so that one of ordinary skill in the art has no objective technical reason to look into Gery to solve a problem that would arise in the field of valves. Moreover, no disclosure has been found in Gery of any guiding means similar to the ones (136c, 453c) mentioned in claim 24.

Claim 26, which replaces claim 9, specifies that the needle (3; ...) of the valve, which is an internal part of the valve that interacts with the fluid flowing through the valve, is covered with an anti-corrosion material. In contrast, Huber

discloses a windshield cleaning device, which is *a priori* remote from the invention. In Hubert, a slide valve (45) can be provided with an anti-corrosion coating, but this slide valve is not provided with ribs and is not supposed to be magnetically driven.

With respect to the rejection of claims 13 and 14, now replaced by claims 30 and 31, Bottum discloses a float controlled humidifier valve that is driven by a float (10). Some tips (64) are used to show a level but these tips are not magnetically coupled to an actuating device as mentioned for the element (8; 508) recited in claim 30. Therefore, if workers of ordinary skill were to seek to use the technical teaching of Bottum, this would not enable them to arrive at the valve of claim 30 since they would not be led to consider magnetically coupling an element located outside the body with an actuating device.

Fisher is cited with respect to claim 15, replaced by claim 32, which depends from claim 30.

As mentioned hereabove, the object of claim 30 is neither known nor obvious for one of ordinary skill in the art, based on the teachings of the applied references, so that claim 32 should also be considered to be patentable along with claim 30.

The patent to Pond, cited but not applied, discloses a valve where a display means is movable in rotation, which is not the case for the element (8; 508) as now defined in claim 30.

In view of the foregoing, it is requested that all of the objections and rejections of record be reconsidered and withdrawn, that claims 19-35 be allowed and that the application be found in allowable condition.

If the above amendment should not now place the application in condition for allowance, the Examiner is invited to call undersigned counsel to resolve any remaining issues.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant

By /jmf/
Jay M. Finkelstein
Registration No. 21,082

JMF:smb
Telephone No.: (202) 628-5197
Facsimile No.: (202) 737-3528
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